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Message-Id: <199601241517.JAA14465@uro.theporch.com>
Errors-To: ws4s@midtenn.net
Reply-To: glowbugs@theporch.com
Originator: glowbugs@theporch.com
Sender: glowbugs@theporch.com
Precedence: bulk
From: glowbugs@theporch.com
To: Multiple recipients of list <glowbugs@theporch.com>
Subject: GLOWBUGS digest 85
X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas
X-Comment: Please send list server requests to listproc@theporch.com
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GLOWBUGS Digest 85

Topics covered in this issue include:

- 1) 01A regen: Lessons Learned
by okasb@shoe.mtv.gtegsc.com (Bob Okas)
 - 2) Re: 01A regen: Lessons Learned
by rdkeys@csemail.cropsci.ncsu.edu
 - 3) Re: QRG 1802R5
by rdkeys@csemail.cropsci.ncsu.edu
 - 4) Military handbook wanted
by robert fowle <hammarlund@voyager.net>
 - 5) Vintage tubes to trade
by Jake Hellbach <kk5hy@accesscom.net>
-

Date: Tue, 23 Jan 96 12:16:55 PST
From: okasb@shoe.mtv.gtegsc.com (Bob Okas)
To: glowbugs@theporch.com
Subject: 01A regen: Lessons Learned
Message-ID: <9601232016.AA28424@shoe.mtv.gtegsc.com>

Fellow Glowbuggers,

Thanks to those who offered sage advice and assistance.

My experiments with the recalcitrant 01A regen have provided further insights. Firstly, just as I had suspected and Bob, NA4G had declared, the Bud coils I'm attempting to use have far too few turns to sing in a

triode circuit. Subbing a known-good 6C5 did not produce the sought-after oscillations. Secondly, I replaced the grid leak components with a 10meg paralleled with a 15 uuF cap. I'm now beginning to appreciate the importance of lightly loading the tank circuit... With a modest wire antenna, I could hear KGO, a local station, in the cans. Swapping the tickler leads decreased the volume, so I had the polarity correct the first time. Increasing the plate supply brought only more volume. Better to leave these coils for a pentode circuit.

I duplicated something I had done in my yute, when I converted a Radio Shack 1-tube radio kit to a regen by winding a secondary around the slug tuned antenna coil. I used a pot to control the regen on the ole 1T4 back then and had a plate supply of about 30V. I just happened to locate one of those slug tuned dealies the other day (it's no coincidence that it got me to thinking about regens again). Winding a 25 turn secondary and clip-leading this lash-up into the circuit finally got some results. Increasing the secondary to 60 turns produced even better regeneration. I did have the B+ at 150V to get consistent results.

Hanging a 150K grid leak decreased the sensitivity. Parallelizing a 3 meg across the grid leak seemed to make it a tad more sensitive, but it was late when I did this and it could very well have been my imagination. Left it in the original state for the moment. I also noted that antennas have a very big effect on detector operation. A 10 foot wire worked fine, but I had to put a 250uuF in series with a 100 footer in order to achieve the desired operating point.

So, it appears I have a mutually-exclusive set of components. The appeal of a battery regen leads me to entertain the notion of applying a spare 1U4 to the detector and a 3V4 for an audio final. Not nearly as romantic as the 01A, but perhaps more functional and easier on the A supply. Then again, I can try to scrounge up some blank plug in coil forms... Hmm, need to slink back into lurkerdom and ponder the implications of this musing...

Bob - N3MBY

Date: Tue, 23 Jan 1996 16:54:30 -0500 (EST)
From: rdkeys@csemail.cropsci.ncsu.edu
To: okasb@shoe.mtv.gtegsc.com
Cc: rdkeys@csemail.cropsci.ncsu.edu (), glowbugs@theporch.com
Subject: Re: 01A regen: Lessons Learned
Message-ID: <9601232154.AA102062@csemail.cropsci.ncsu.edu>

>
> Fellow Glowbuggers,
>
> Thanks to those who offered sage advice and assistance.

Yer most welcomes, fer sures.....(:+}{}..... There is a great and goodly quantity of net knowlege amongst the feller Glowbug folks.

> I replaced the grid leak components with a 10meg
> paralleled with a 15 uuF cap. I'm now beginning to appreciate the importance
> of lightly loading the tank circuit...

Now you have begun to touch upon a dear, so dear subject amongst regenerators, that be the subject of selectivity in a regen receiver. MOst folks seem to think that a regenerator is nil on selectivity. But, if you reduce the loading on the primary and secondary circuits at the grid end of things, one will happily find that the Q goes up sufficiently to cut the sidebands off a sideband signal --- that causes some funny head scratchin' amongst de ol' unknowing rabble wats inhabits them dead/no-glo/bug-legged thingie worlds. It is amazing to run a regen at 36 volts on the plate and slice a cw signal into clicks and a ssb signal into mush and an am signal into oblivion. The trick is to LIGHTLY LOAD the tuned circuitry. You hit it squarely on the ol' noggin nailhead.

One of the most learned practitioners of the art of regenerators, none other than the well known ``Fred Sutter'' of prewar QST fame with the QSL sized transmitters of up to 100 watts, wrote a most fine article, about 1939 or so in QST, that detailed the tremendous selectivity one could get with a simple regenerative receiver using only a 12 inch antenna. This article is MUST reading for the group. John Reinartz and Perry Briggs originated the idea of low-loss (read hi-Q) designs back in 1922 and 1923. Their original articles also make MUST reading for the group.

> I also noted that antennas have a very big effect on detector
> operation. A 10 foot wire worked fine, but I had to put a 250uuF in series
> with a 100 footer in order to achieve the desired operating point.

Well said. Again --- LIGHTLY LOAD the front end of the regenerative receiver, and DO TUNE the antenna to proper resonance, and DO UNCOUPLE the antenna to the absolute minimum required for proper headfone volume. In the early days of ``low-loss'' detectors (early 1920's), it was not uncommon to use a 6 inch coupling to decouple detectors sufficiently from the tuned antenna circuits. Commercial regenerative receivers of the 10's, 20's and 30's all had variable coupling adjustments to DECOUPLE the antenna while tuning it to resonance. IF YOU DONT decouple it sufficiently, it will pull or totally block the regenerative detector preventing oscillation --- a very common occurrance among the uninitiated.

> So, it appears I have a mutually-exclusive set of components. The appeal
> of a battery regen leads me to entertain the notion of applying a spare 1U4
> to the detector and a 3V4 for an audio final. Not nearly as romantic as the
> 01A, but perhaps more functional and easier on the A supply. Then again, I can
> try to scrounge up some blank plug in coil forms... Hmm, need to slink
> back into lurkerdom and ponder the implications of this musing...

Do slinke backe into lurkerdom but on the return trip, ferret out such parts
of a fine and productive ilk so as to put forthe upon the lande a great and
wondrous, yet most mannerly receiver of the regenerative type.....(:+})....
Yer '01 will do well, with a little more TLC.....Go For It!!!!

If anyone wants a lookie-see at several tried and proven regenerators, look
in the Glowbug Archives ftp repository machine.....

ftp://triodc.cc.tntech.edu/Photos (login anonymous password <anything>)
(149.149.11.72)

The gif shots na4g7 and na4g8 are my single tube regenerator.

The gif shots na4g15 and na4g16 are my two tube signal slicer regenerator.
This is the one that can easily slice a signal into oblivion on the ragged
edge of regeneration.

The gif shots na4g17 and na4g18 are my 1925 style '01A detector and one step
audio regenerator made with approximately period (1920's-1930's parts). This
one has the proper look and feel for armchair late-nite cruising the ether
waves of 200 meters and down.....

I hope to have the rest of them indexed and catalogued shortly. The one and
only Miss Henrietta Hartley are shots na4g11 and na4g12. Her grandmother
(the original George Grammer 1932 QST reproduction using the 6AS7G tube) is
in na4g1.gif.

> Bob - N3MBY

Great Going There Bob..... Ain't it great fun.....!

73/ZUT DE NA4G/Bob

Date: Tue, 23 Jan 1996 17:15:37 -0500 (EST)
From: rdkeys@csemail.cropsci.ncsu.edu
To: gregp@galileo.mis.net (Greg Parsons A.K.A. Rat)
Cc: rdkeys@csemail.cropsci.ncsu.edu (), glowbugs@theporch.com

Subject: Re: QRG 1802R5
Message-ID: <9601232215.AA102125@csemail.cropsci.ncsu.edu>

>
> Bob,
> Heard you guys last night, I could pick you out ok, finally got all the call
> <g>. I will admit I had a hard time copying you guys last night, I haven't
> touched code since I got my general, looks like I have lots of work to do to
> get up to any speed... Now for the \$64 question, what the heck does the R
> stand for? everyone I have asked around here has no clue, is it 1802.5? or
> 1802 - 1805? I have most of the parts scrounged up for the hightly, just got
> to find some var. caps to finnish it up, no one around has any, and waiting
> for my cat. from the radio place in Az. Hopefully there will be some parts at
> the Cinn. Ohio hamfest coming up the end of Feb. Oh well have a good one,
> and I will be lissening for you guys at night.
>
> 73,
> Greg
> KE4000
> gregp@mis.net

Great! Glad to have others aboard/lurking, etc. Don't worry about your QRQ or QRS, just drop in and we will push everyone along over time up to 20wpm or so on the straight shooting iron (that is as fast as my QLF goes without making my ol' glass telegrapher's arm take front seat). Remember, half the fun of Glowbuggin' is actually puttin' the beastie on the air!

All one can do anymore for parts is scrounge, scrounge, and more scrounge. Also, it helps to look UNDER hamfest tables and DIG down into boxes, etc. Ask around all the old timers, and there may be a few caps floating about.

The R is used telegraphically in one of three usual modes, 1) as the letter R, 2) as an indicator of correctly receiving a string of text, as in message handling or general QSO's, or 3) as the shorthand form of the decimal point. Hence in CW lingo, 1802.5 is 1802R5.

The general QRG for the group is the bottom of the 160 meter band. That is generally anywhere from 1802 to 1805 khz depending upon who is there and how close one wants to twiddle the edge of the band. I, myself, like to get down to 1802 or 1803 because that way there is rarely anyone underneath you so it gives a slight bit of breathing room in the QRM. I always monitor using two receivers and one has a direct digital readout. So, I am always reasonably close to accurate (within about half a KC of where I want to go). Add the 400hz bandwidth of CW and I can comfortably scoot down to within 1khz of the band edge and be properly restrained within the band....(:+}{}..... That way ol' Miss Henrietta Hartley or Big Bertha Radiomarine are happy, and the regen is happy too.....!

73/ZUT DE NA4G/Bob

Date: Tue, 23 Jan 1996 20:25:38 -0500
From: robert fowle <hammarlund@voyager.net>
To: boatanchors@theporch.com
Cc: glowbugs@theporch.com
Subject: Military handbook wanted
Message-ID: <199601240125.UAA06199@vixa.voyager.net>

Good evening;

still looking for a military handbook # HDBK- 161, (I believe this is correct). anyone having one and wishing sell (or trade) please drop me a line.

Thanks

Robert Fowle
the HAMMARLUND historian
Ph. 517-789-6721
E-mail: Hammarlund@vixa.voyager.net
1215 Winifred
Jackson, Mich. 49202-1946

Date: Tue, 23 Jan 96 21:52 CST
From: Jake Hellbach <kk5hy@accesscom.net>
To: glowbugs@theporch.com
Subject: Vintage tubes to trade
Message-ID: <199601240351.VAA05158@uro.theporch.com>

Hello To all,

I have some tubes I would like to trade for a tube type receiver or transmitter. Would prefer Halicrafters or Hammarlund. and 80 to 6 meter. (or what have you)

quantity	type
4	24A
2	27
2	45
1	80

Not much but let me know what you have, all test good and are used.
Thanks Jake KK5HY

+++++

Email via: kk5hy@accesscom.net

Check out the Westside ARC Web page at:

<http://www.accesscom.net/~kk5hy>

Updated with boatanchor links

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End of GLOWBUGS Digest 85
